REMARKS:

The Examiner's allowance of claims 63-71, and his indication of allowability with respect to claim 56, is respectfully requested.

Reconsideration of the Examiner's rejection of claims 39-41, 47, 52, 53, 54, 55 and 58-62 under 35 U.S.C. § 102(e) as being anticipated by U.S. 6,614,730 (Vo-Dinh) is respectfully requested.

In order to anticipate a claimed invention, a cited reference must teach or disclose each and every element of the claimed invention. In the present case, Vo-Dinh does not anticipate claim 39, because the system described therein does not utilize reflections of electromagnetic radiation to read data from the data storage media described therein. Rather, the reference utilizes a laser to excite dye molecules in the storage media, and the Raman scattered emissions from these molecules (which are of different frequency, and hence wavelength, than the incident radiation) are read by an optical detector. Hence, the reference fails to teach or disclose the step of "receiving ... reflections of the electromagnetic radiation from the first and second data storage media".

For the sake of completeness, Applicant proffers the following definition of the term "reflection", which can be found in the on-line dictionary at Allwords.com at **http://www.allwords.com/query.php?SearchType=3&Keyword=reflection&goquery=Find+it!&Language=ENG**. As noted therein, the term "reflection" refers to

> The change in direction of a particle or wave, eg the turning back of a ray of light, either when it strikes a smooth surface that it does not penetrate, such as a mirror or polished metal, or when it reaches the boundary between two media.

Clearly, the radiation which impinges upon the storage medium of Vo Dinh is not reflected, because it does not merely change direction upon impingement. Rather, the radiation is adsorbed by the dye molecules in the storage medium and, as noted above, is subsequently emitted as Raman emissions (that is, as radiation which has a different frequency, and hence wavelength, than the incident radiation).

The aforementioned difference is significant, because the processes and systems described in Vo-Dinh are unique to the particular data storage medium disclosed therein. By contrast, the systems and methodologies of the present invention can be used with conventional data storage media, which rely on the phenomenon of reflection (not absorption and subsequent Raman emission) of the incident radiation.

Reconsideration of the Examiner's rejection of claims 39-55 and 57-62 under 35 U.S.C. § 102(e) as being anticipated by U.S. 5,446,565 (Komma et al.) is respectfully requested.

In order to anticipate a claimed invention, a cited reference must clearly teach or disclose each and every element of the claimed invention. In the present case, all of the rejected claims depend from claims 39 and 53. However, Komma et al. fails to clearly teach the element of claim 39 of "simultaneously directing electromagnetic radiation onto the surfaces of the first and second data storage media". Komma et al. also fails to clearly teach or disclose the element of claim 39 of "receiving, as a multidimensional data stream, reflections of the electromagnetic radiation from the first and second data storage media". Similarly, with respect to claim 53, Komma et al. fails to clearly teach or disclose the elements of "directing the first signal onto the surfaces of first and

second static data storage media" and "receiving a second, multidimensional signal from the data storage media".

The Examiner specifically references FIGs. 21 and 62 of Komma et al., and points to elements 23 or 25 in those figures as examples of data storage media, and beams L4 and L5 as examples of electromagnetic radiation being simultaneously directed onto the first and second data storage media. However, the Examiner is respectfully reminded that a reference must be construed as a whole for what it fairly suggests to one of ordinary skill in the art. In the present case, Applicant respectfully submits that, when the reference is properly construed, it does not support the teachings that the Examiner is ascribing to it.

One of the problems Komma et al. was concerned with solving was the emergence of new optical disks having higher storage densities than existing, conventional disks. See, e.g., Col. 3, Lines 49-68. In order to achieve the higher storage densities, it was necessary to make these disks thinner than conventional disks. In particular, as explained at Col. 4, Lines 4-13 of Komma et al., it was necessary to thin the higher density disks from 1.2 mm to 0.6 mm in order to avoid increasing the numerical aperture (and the associated degree of aberration) associated with the higher density disks.

Unfortunately, it was also found that the optical aberrations arising from the reduced disk thickness made it impossible to read from or write to the high density disks when conventional optical heads were used. See Col. 4, Lines 30-44. This problem was attributed to the tight thickness tolerances of the optical head. To overcome this problem, Komma et al. sought to provide an optical head having an imaging optical system capable of converging a light beam on an optical disk within the diffraction limit, regardless of whether the disk was of the older, thicker variety, or the new, thinner variety. See, e.g., Col. 6,

Lines 21-25. In this way, the same optical head could be used to read from or write to either the new, higher density disks or older, conventional disks.

The solution to this problem as explained in Komma et al. was to provide a compound objective lens that has two focal points. See, e.g., Col. 6, Lines 51-62. The resulting lens is thus capable of converging a light beam within the diffraction limit on an optical disk of either thickness.

Contrary to the Examiner's insinuation, however, Komma et al. neither teaches nor suggests reading from or writing to both disks simultaneously. To the contrary, it is clear that Komma et al. contemplated doing so only in the alternative. Thus, for example, as noted at Col. 25, Lines 51-55 of Komma et al.:

> As shown in FIGS. 4A, 4B, an imaging optical system 21 for converging light on a first substrate 22 of a thin type of first information medium 23 (a thickness T1) **or** a second substrate 24 of a thick type of second information medium 25 (a thickness T2) to form a diffraction-limited converging spot … . [emphasis added]

Notably, everywhere the system of Komma et al. is depicted (FIGs. 4A-4B, 9A-9B and 10A-10B), disks 23 and 25 are shown being accessed by the system separately. Here, it is notable that that each figure in the pairs cited by the Examiner is a separate figure, not two parts of the same figure. It is further notable that, in each figure depicting an apparatus in which both disk types are present (see FIGs. 21, 27, 30-33, 37, 38, 40B, 43, 44, 50, 52, and 60-62), the optical path for reading from and writing to the newer, thinner disk is indicated with a dashed line, while the optical path for reading from and writing to the conventional disk is indicated with a solid line. This demonstrates that Komma et al. intended these to be alternative, not simultaneous, paths. Indeed, Komma et al.

does not disclose a means or methodology for accessing more than one disk at a time. Rather, such a means and methodology is disclosed only within the four corners of the present application.

Applicants submit that the pending claims are in condition for allowance. An early indication thereof is respectfully solicited.

The fee for a one-month small entity extension of time is included herewith. It is believed no further fee is due with this submission, however, should a further fee be deemed due, or a credit proper, the Commissioner is respectfully requested to charge any fee deficiency due with this amendment, and to credit any overpayment, to Deposit Account No. 50-2583.

Respectfully submitted,

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Date

John A. Fortkort
Registration No. 38,454

Fortkort Grether + Kelton LLP
8911 N. Capital of Texas Hwy., Suite 3200
Austin, TX 78759
Telephone: (512) 279-3105
Facsimile: (512) 279-3101